

I found *K. arvensis* an abundant plant in about half a dozen fields and hillsides within a mile of the place where I had first met with *C. flaviciliana*, but in only one of these was there the slightest trace of larvæ.

The original locality is a valley, on the bottom of which is a strip of cultivated land perhaps 300 yards wide. The sides of this valley are either open downs or rough flowery fields; they rise above the bottom perhaps 200 feet. *C. flaviciliana* was found in 1915 on one side of this valley, from the edge of the cultivated strip almost to the brow of the hill. As one walks to the top of the slope, the hill is seen to be a flat plateau perhaps 100 yards in width, and crossing this one comes to a steep slope leading down to another valley, very similar in appearance and growth to the first. In this valley *K. arvensis* is abundant, and as it certainly has not been cultivated for the last thirty or forty years, I felt sure that I should find *C. flaviciliana*, but there was not the slightest trace of it.

The new locality which I found was in the first valley, on the other slope to the original locality, and immediately opposite to it. Both these localities did not extend more than 200 yards up the length of the valley, and they were terminated at each end by a high, thick hedge, over which the imagos did not appear to be able or willing to establish the species, although *K. arvensis* occurred freely both higher up and lower down the valley. No doubt before the sole of the valley was cultivated *C. flaviciliana* occupied it also.

I take it that the reason of the excessive localism of the species is, firstly, its inability to spread over any trifling obstacles; and, secondly, its habitat must never have been cultivated, or at any rate mown, for of course this destroys the larvæ if the mowing takes place in the month of August; and, if earlier, leaves the female without anything suitable to deposit her ova upon.

January 6th, 1917.

SOME STEPHANIDÆ: WITH DESCRIPTIONS OF NEW SPECIES.

BY CLAUDE MORLEY, F.Z.S., ETC.

IN connection with the proposed forthcoming monograph of this family of parasitic Hymenoptera throughout the world by Ernest A. Elliott, Esq., F.Z.S., etc., it were well to here place upon record the descriptions of two or three species found in the course of work thereon to be new. For their affinities I am indebted to the monographer. This is a small and very specialised family, of which no more than some sixty-six species were recognised in 1900; since which time a comparatively large number of additional ones have been brought forward in

very scattered literature. The total of Stephaninæ nowadays (as distinct from the less typical Stenophasminæ) appears to stand at about 111 species. I shall at present mention but half a dozen.

Stephanus tibiator, Schlett.

'Berl. Ent. Zeits.,' xxxiii, 1889, p. 293, ♂.

Four females were captured by Mrs. Everard during 1911 at Aden, in South-West Arabia. These abdomens may thus be described:

Petiole much shorter than remainder of the abdomen (*i. e.* 6 mm. to 10 mm.), evenly and moderately trans-striate throughout, excepting at the apex, which is glabrous and nitidulous; the striation extends to both lateral and ventral surfaces; remaining segments smooth and shining, with base of the second narrowly transaciculate and a few scattered hairs upon both the sides of the sixth segment and dorsum of seventh. Terebra a little shorter than body (*i. e.* terebra 20 mm., and body 24 mm.). From the typical description, the present insects differ in nothing.

Stephanus Ceylonicus, Cam.

'Journ. Str. Br. R. Asiatic Soc.,' xxxix, 1903, p. 102, ♀.

Col. Yerbury took the type at Trincomali before 1892. Mr. O. S. Wickwar has been so good as to present me with two Ceylonese females; one was found by him at Kandy during September, 1909, and the other was captured at Galgamua in the following February.

Stephanus tortus, sp. nov.

A large black species with the petiole, part of the legs and mouth piceous, and the terebra white-banded. Face reticulately, but not transversely, rugose; frontal tubercles conspicuous and acuminate, posterior tubercles small; occiput coarsely reticulate laterally, centrally transaciculate, its posterior margin simple. Second flagellar joint a little longer than the first, third as long as second. Colliform prothorax transrugose; semi-annular part glabrous; mesonotum smooth, with a central row of punctures, but the lateral ones indistinct; mesopleuræ smooth above, rugulose below; metapleuræ rugulose and separated from median segment by a shining and glabrous sulcus; median segment strongly and moderately punctate, with its apex transaciculate. Petiole shorter than rest of abdomen (9 mm. to 10 mm.), finely trans-striate throughout; remainder of abdomen smooth and shining; terebra a third longer than body (34 mm. to 26 mm.), and subapically banded with white. Hind coxæ discally glabrous, and there finely tuberculate, below and within obsolete trans-striate; hind femora bidentate, shining and smooth, with very sparse hairs and punctures; their tibiæ compressed at

basal third, centrally excised and apically inflated. Wings slightly infumate throughout.—Black: mandibles and a spot before their base red; petiole dark red; abdomen piceous; anterior legs, except basally, red; hind tibiæ piceous, centrally clear red.

A much stouter species than *S. Ceylonicus*; the peculiar conformation of the hind tibiæ appears remarkable, as also are the unusually short second and third flagellar joints.

A single female, sent me by Mr. Wickwar, was captured during September, 1905, at Nedunkernie, in the Northern Provinces of India.

Parastephanellus rufidornatus, Cam.

Stephanus rufo-ornatus, Cam., 'Tijds. v. Entom.,' xlviii, 1905, p. 45, ♂.

The type is from the Burnett River, in Queensland. I have seen another male, taken (very probably with more of both sexes, though the female is still undescribed) by Mr. Turner at 1100 feet about Kuranda, in the north of the same State, during May–June, 1913.

Parastephanellus eburneus, sp. nov.

A very small black species, with sparse white and testaceous markings. Face rugously trans-striate; frontal tubercles acuminate, the anterior is apically deflexed; posterior tubercles normal; occiput finely trans-striate, with its posterior margin bordered. Second flagellar joint half as long again as the first, the third shorter than first and second. Colliform prothorax smooth, shining, and quite short, the semiannular part finely rugulose; mesopleuræ obsoletely trans-striate and dull throughout; metapleuræ glabrous and nitidulous, separated from the metanotum by a deep sulcus; median segment smooth with large and diffuse punctures. Petiole longer than remainder of abdomen, with its basal half finely trans-striate; rest of segments dull and obsoletely punctate; terebra shorter than body (*i.e.* 5 mm. to 6 mm.), immaculate black. Hind coxæ obsoletely trans-aciculate; their femora bidentate, shining, and nearly smooth; their tibiæ compressed to centre. Wings clear hyaline and not large.—Black: face, clypeus, mandibles except apically and a streak at the inner orbits testaceous-white; a broad streak from base of mandibles below the eyes to near occiput clear ivory-white; scape and basal flagellar joints testaceous; tegulæ and stigma pale; anterior femora and tibiæ piceous, all tarsi testaceous, and both base and apex of intermediate tibiæ clear white.

The ♂ differs very slightly in its smaller size of but $3\frac{1}{2}$ mm., its piceous petiole and testaceous genital valvulæ.

This is closely related to the last-named species from Australia, but differs in the metanotal sculpture and the colouration, more especially that of the anterior legs and the intermediate tibiæ.

The typical female was captured at Kandy by Mr. O. S. Wickwar during February, 1910; the androtype was discovered by Mr. E. E. Green on a leaf infested by the Coccid, *Hemichionaspis Brasilicnsis*, in June, 1909, at Peradeniya, also in Ceylon.

Fenatopus Indicus, Westw.

Stephanus Indicus, Westwood, 'Ann. Nat. Hist.,' vii, 1841, p. 538.

This species occurs throughout the Malay Archipelago; and to it appears to belong a female taken by Mr. G. E. Bryant at some 2000 feet upon Mt. Matang, in Sarawak, on December 14th, 1916.

Monks' Soham, Suffolk,
November 1st, 1916.

DESCRIPTIONES HYMENOPTERORUM CHALCIDOIDICORUM CUM OBSERVATIONIBUS.

IV.

BY A. A. GIRAULT.

Cosmocomoidea morilli, Howard.

A SERIES of specimens (identified by Howard) reared from leaf-hopper eggs on sugar-cane, October, 1911, San Lucrezia, Vera Cruz, Mexico (F. W. Urich). The male antennæ are 13-jointed, contrary to the original description. The genus, thus, is *Gonatocerus* save for the distinct (longer than wide) petiole of the female abdomen. Compared with types of both sexes. In these Mexican specimens (females), the abdominal petiole was only slightly longer than wide; and the head (except vertex) and sides of the base of the abdomen, the parapsides, the propleurum, and the legs (except the caudal tibiæ) of the male were honey yellow. The abdominal petiole is decidedly shorter in the males, the abdomen subsessile in the Mexican male, which also had the fascia on the fore wing. In the cotype females I find the abdominal petiole varies much in length, sometimes no longer than with the Mexican series of females. In the female, the most conspicuous marking is the cross-band of dorsal abdomen at about middle; the other black markings are more or less obscure. The scutellum is scaly. The thoracic structures are as in *Gonatocerus* and the genus is *Ooctonus*.

Blastothrix bohemani, Westwood.

The two mandibular teeth are acute, and the species is an *Epidinocarsis* (or *Anagyris*). From a specimen labelled in the U.S.N.M.